

AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS

1. (Cancelled)

2. (Previously Presented) The stereo camera according to claim 9, wherein said pair of photographing optical systems each comprise a photographing lens and an image pickup device, and

said convergence angle adjustment mechanism comprises a drive mechanism which rotates each photographing optical system to vary the angle of convergence in a direction to make median lines of field angles of said pair of photographic optical systems intersect each other.

3. (Previously Presented) The stereo camera according to claim 2, wherein said drive mechanism comprises:

a pair of rotary plates having respective center axes of rotation in parallel with each other, said pair of rotary plates supporting said pair of photographing optical systems and having inter-meshing sector gears;

a sector worm wheel provided on one of said rotary plates; and

a worm which is in mesh with said sector worm wheel, said worm being secured to a drive shaft of a motor.

4. (Previously Presented) The stereo camera according to claim 9, wherein said convergence angle adjustment mechanism comprises a variable angle prism provided in a light path of each said pair of photographing optical systems.

5. (Previously Presented) The stereo camera according to claim 9, wherein said convergence angle adjustment mechanism comprises a drive mechanism that moves at least a part of each of said pair of photographing optical systems in a direction of a base length of said pair of photographing optical systems.

6-8. (Cancelled)

9. (Previously Presented) A stereo camera comprising:

a pair of photographing optical systems that produce a corresponding pair of photographing areas, said pair of photographing optical systems being located in a common plane to produce a common photographing coverage between each of the pair of photographing areas, each photographing optical system including an image pickup device that performs a passive distance measurement of an object distance;

an object distance measuring device that performs an active distance measurement to measure a distance to an object;

a convergence angle adjustment mechanism that varies an angle of convergence, defined by optical axes of said pair of photographing optical systems, to

adjust an amount of the common photographic coverage of said pair of photographing optical systems; and

a controller that controls each of the pair of photographing optical systems to perform the passive distance measurement of an object distance until such time as a release button is depressed at least by a half step, controls the object distance measuring device to perform the active distance measurement after the release button is depressed at least by a half step, and controls the convergence angle adjustment mechanism in accordance with object distance data corresponding to the measured distance to the object obtained by the active measurement.

10-14. (Cancelled)

15. (Previously Presented) The stereo camera according to claim 9, said controller further controlling each of the pair of photographing optical systems to perform photometering operations until said release button is depressed at least by a half step.

16. (Previously Presented) The stereo camera according to claim 9, said controller further controlling each of the pair of photographing optical systems to perform autoexposure and/or autofocus operations until said release button is depressed at least by a half step.

17-18. (Cancelled)